What is Claimed is:

1. A method of forming a material, said method comprising:

(a) providing at least one energy source;

(b) feeding a precursor into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor within gasses;

(c) directing the gasses along a first path; and

(d) providing at least one source of pressure differential and applying the at least one source of pressure differential to the localized environment of the at least one energy source, such that the localized environment is selectively changed to redirect the gasses from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material.

2. The method of claim 1, wherein causing the gasses to contact a surface includes contacting a substrate to form a coating of the material thereon.

3. The method of claim 2, wherein the coating is formed less than 5 microns in thickness.

4. The method of claim 2, wherein the coating is formed less than 0.5 microns in thickness.

5. The method of claim 1, wherein causing the gasses to contact a surface includes contacting a surface of a device for separating and collecting a powder of the material.

6. The method of claim 1, wherein the precursor is a solution derived from a liquid.

7. The method of claim 1, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 10%.

8. The method of claim 1, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 30%.

9. The method of claim 1, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 60%.

10. The method of claim 1, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 100%.

11. The method of claim 1, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 10% compared to the temperature of the energy source relative to the temperature of the surface.

12. The method of claim 1, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 25% compared to the temperature of the energy source relative to the temperature of the surface.

13. The method of claim 1, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 50% compared to the temperature of the energy source relative to the temperature of the surface.

14. The method of claim 1, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 70% compared to the temperature of the energy source relative to the temperature of the surface.

15. The method of claim 1, wherein the localized environment is within 20cm of the energy source.

16. The method of claim 1, wherein the localized environment is within 10cm of the energy source.

17. The method of claim 1, wherein the localized environment is within 5cm of the energy source.

18. The method of claim 1, wherein the localized environment is within 2cm of the energy source.

19. The method of claim 1, wherein the localized environment comprises a pressurized environment having any pressure between 1-10,000 torr.

20. The method of claim 1, wherein the localized environment comprises an open atmosphere environment.

21. The method of claim 1, wherein the gasses include liquid that is at least partially vaporized.

22. The method of claim 1 wherein the at least one energy source comprises at least one combustion source.

23. The method of claim 1 wherein providing at least one source of pressure differential comprises providing at least one source of pressurized fluid.

24. The method of claim 23 wherein the pressurized fluid is a gas.

25. The method of claim 24 wherein the pressurized gas is directed close to, but not directly at the at least one energy source, thereby forming the pressure differential that redirects the gasses toward the surface.

26. The method of claim 24 wherein the pressurized gas intercepts the gas flow out of the at least one energy source, thereby redirecting the gasses toward the surface.

27. The method of claim 23 wherein the pressurized fluid contains a liquid.

28. The method of claim 23 wherein:

(a) the pressurized fluid comprises an additional precursor; and

(b) the energy source causes the additional precursor to react to create additional gasses that form at least part of the material.

29. The method of claim 23 wherein:

(a) the pressurized fluid comprises additional material; and

(b) the additional material forms at least part of the formed material.

30. The method of claim 1 wherein the at least one energy source includes at least two energy sources.

31. The method of claim 1 wherein the at least one source of pressure differential includes at least one source of vacuum.

32. The method of claim 1 wherein the at least one source of pressure differential includes at least two sources of pressure differential.

33. The method of claim 32 wherein the at least two sources of pressure differential includes at least one source of vacuum and at least one source of pressurized fluid.

34. A system for forming a material, comprising:

a nozzle for directing a precursor material along a first path;

an ignition mechanism for igniting the precursor material and for vaporizing at least a portion of the precursor material; and

a redirect jet for creating a pressure differential along the first path to thereby redirect the at least partially vaporized material from the first path to a redirected path for causing the at least partially vaporized material to contact a surface and thereby form the material.

35. A system according to claim 34, wherein the redirect jet comprises a nozzle for directing a stream of gas at the at least partially vaporized material.

36. A system according to claim 34, wherein the redirect jet comprises a nozzle for applying a negative pressure to the at least partially vaporized material.

37. A system according to claim 34, further comprising a flow controller for adjusting a flow rate of gas stream being projected from the redirect jet.

38. A system according to claim 34, wherein the redirect jet includes a pivot mechanism for adjusting an angle at which the redirect jet acts on the at least partially vaporized material.

39. A system according to claim 34, further including a controller for adjusting a relative mix of at least partially vaporized precursor material and a gas being delivered from the redirect jet.

40. An insulator for an electrical conductor or superconductor, said insulator consisting of a thin film coating of at least one electrically insulating oxide.

41. The insulator of Claim 40 wherein the thickness of said thin film coating is less than one micron thick.

42. The insulator of Claim 41 wherein the thickness of said thin film coating is less than one hundred nanometers thick.

43. The insulator of Claim 40 wherein said electrically insulating oxide is silica.

44. The insulator of Claim 40 wherein said insulator has a breakdown voltage of greater than 20 volts.

45. The insulator of Claim 40 wherein said insulating oxide is further coated by an organic containing coating.

46. An insulated electrical conductor or superconductor, said insulated electrical conductor or superconductor comprising an electrical conductor or superconductor and an electrical insulator, said electrical insulator consisting of a thin film coating of an electrically insulating oxide.

47. The insulated electrical conductor or superconductor of Claim 46 wherein the thickness of said thin film coating is less than one micron.

48. The insulated electrical conductor or superconductor of Claim 46 wherein the thickness of said thin film coating is less than one hundred nanometers.

49. The insulated electrical conductor or superconductor of Claim 46 wherein said insulator has a breakdown voltage of greater than 400 volts.

50. The insulated electrical conductor or superconductor of Claim 46 wherein said insulator has a breakdown voltage of between 5 and 75 volts.

51. The insulated electrical conductor or superconductor of Claim 46 wherein said electrically insulating oxide is silica.

52. The insulated electrical conductor or superconductor of Claim 46 wherein said insulating oxide is further coated by an organic containing coating.

53. A laminate comprising a polymer-containing material coated with a combustion, chemical vapor-deposited or redirected chemical deposited barrier layer, said barrier layer being a metal, an oxide or a combination of metal and oxide coating that inhibits gas and vapor transmission and/or provides a scratch resistant surface.

54. The laminate of Claim 53 wherein said barrier layer is between about 100 and about 1500 nanometers thick and provides a Taber abrasion of $<10\% \ \Delta$ haze.

55. The laminate according to Claim 54 wherein said barrier layer is between about 500 and about 1000 nanometers thick.

56. The laminate according to claim 534 wherein said barrier layer is silica.

57. The laminate according to claim 53 wherein said polymer-containing material comprises polycarbonate.

58. The laminate according to Claim 53 wherein said polymer containing material comprises polyester.

59. The laminate according to Claim 53 wherein said polymer containing material comprises polyethyleneterephthalate.

60. The laminate according to Claim 53 wherein said polymer containing material comprises polyamide.

61. The laminate of Claim 60 wherein said barrier layer comprises silica.

62. The laminate of Claim 60 wherein said barrier layer further comprises Pt.

63. The laminate of Claim 60 wherein said barrier layer further comprises chromia.

64. The laminate of Claim 60 wherein said barrier layer further comprises an alkaline earth metal oxide.

65. The laminate of Claim 64 wherein said alkaline earth metal oxide is chosen from the group consisting of magnesia, calcium oxide, strontium oxide, and barium oxide.

66. The laminate of Claim 53 wherein said barrier layer further comprises an alkali metal oxide.

67. The laminate of Claim 66 wherein said alkali metal oxide is chosen from the group consisting of an oxide of sodium and potassium.

68. The laminate of Claim 53 wherein said barrier layer further comprises a metal chosen from the group consisting of gold or platinum.

69. The laminate of Claim 53 wherein said barrier layer comprises a plurality of sublayers formed of inorganic materials of different composition.

70. The laminate of Claim 69 wherein said barrier layer comprises alternating sublayers of (a) alkaline earth metal oxide or alkaline earth metal oxide mixed with silica and (b) silica.

71. The laminate of Claim 70. wherein said alkaline earth metal oxide is magnesium oxide.

72. The laminate of Claim 71 wherein at least one of said layers (a) is an inner layer in contact with a polymer.

73. The laminate of claim 72 wherein said polymer contains carbonyl moieties.

74. A laminate comprising:

a first layer in the form of an organic substrate; and

a second layer comprised of one of an interface or surface layer comprising at least one material chosen from the group consisting of Pt, Pd, CuO, Cu_2O, silica, chromia, ZnO, alumina, titania, magnesia, copper, nickel, gold, WC, TiN and carbon or silicon based polymers, said second layer being less than 10nm in thickness.

75. The laminate of Claim 74 wherein said second layer is an interface layer and said laminate comprises an third, surface layer comprising at least one material chosen

from the group consisting of silica, chromia, ZnO, alumina, titania, magnesia, copper, nickel, gold, WC and TiN; wherein said laminate-interface layer provides enhanced adhesion between said substrate and said surface layer.

76. The laminate of Claim 75 wherein said surface layer provides wear and/or corrosion resistance.

77. The laminate of Claim 75 wherein said second, interface layer comprises at least one material chosen from the group consisting of Pt, Pd, CuO, Cu_2O and carbon or silicon based polymers.

78. A laminate comprising a polymer substrate and an oxide coating on said polymer substrate between about 100 and about 1800 nanometers thick providing a Taber abrasion of $<10\%$ Δ haze.

79. The laminate of Claim 78 providing a Taber abrasion of $<6\%$ Δ haze.

80. The laminate of Claim 78. providing a Taber abrasion of $<2\%$ Δ haze.

81. The laminate according to Claim 78 wherein said oxide coating is between about 500 and about 1000 nanometers thick.

82. The laminate according to claim 78 wherein said barrier layer is silica.

83.. The laminate according to claim 78 wherein said polymer substrate comprises polycarbonate.

84. The laminate according to claim 78 wherein said polymer substrate comprises polycarbonate.

85. The laminate according to Claim 82 wherein said polymer substrate comprises polycarbonate.

86.The laminate according to Claim 78 wherein said polymer substrate is selected from the group consisting of polyesters, polyamides, and polyolefins.

87. A method of forming a material, said method comprising:

(a) providing at least one energy source;

(b) feeding a precursor into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor within gasses;

(c) directing the gasses along a first path; and

(d) redirecting said gases along a second path, to thereby cause the gasses to contact a surface and form at least part of the material.

88. The method according to Claim 87 wherein an obstruction is placed in said first path for redirecting said gases to said second path.

89. The method according to Claim 87 wherein said second path is directed to an interior wall.